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## PRONOUNCERS.

Do you not find, in almost every company, one who pronounces decisively upon every matter which comes in question? His voice is loud and firm, his eye bold and confident, and his whole manner oracular. No cold hesitations as to points of fact ever tease him. Little time does he require to make up his mind on any speculative subject. He is all *yes* or all *no* at once and without appeal. Opposite opinions he treats with, at the best, a sublime pity, meant to be graceful, but, in reality, galling. He is often a goose; but, be he what he may, it is ten to one that he carries off the majority of the company in the mere sweep of his gown. They are led by him for the time, fascinated by the energy of his pronunciations. They may all recover from him afterwards—some after one day, some after two, and particularly weak men after, perhaps, a week. At the moment, however, the pronouncer has vast influence, and, if immediate action can be determined on, it is very likely that he drags his victims into some committal of themselves, from which subsequent escape may not be very easy.

While pronouncing is thus the prominent quality of a few, it is more or less the vice of nearly all. Men feel that they have an inherent right to their opinion, and to the promulgation of it, and are not very apt to reflect that there is another question—as to whether their opinion be worth delivering; whether it has been formed upon a good basis of knowledge or experience, or upon any basis at all; whether it is the emanation of ripe judgment and reflection, or of some mere passing gust of ideas springing from the whim of the minute. Hence, when any question arises, it is seldom found that any one is quite unprepared to give some sort of decision. Even the giddy girl of seventeen will have something to say upon it, albeit she may never have heard of the matter before. It is thought foolish-looking not to be able to pronounce, as if one imperiled the right of private judgment itself by not being prepared in every case to act upon it. In consequence, what absurd opinions do we hear in all kinds of companies upon all kinds of topics! How the angels, who know better, must weep!

A conversational party even of tolerably well-educated persons, often presents itself in a ludicrous light. Some question has arisen amongst them. No one has any clear or definite information upon it. They have had disputes about the simplest matters of fact involved in it. Yet no person there, down to the youngest, but would take scorn to be held as incapable of pronouncing upon it. There are as many opinions as there are persons present, and not one less confident than

another. What is very natural in such circumstances, no one has the least respect for the opinions of any of the rest. Each, in fact, does justice upon his neighbour for the absurdity of pronouncing without grounds, while incapable of seeing the absurdity in himself. And thus an hour will be passed in a most unprofitable manner, and perhaps the social spirit of the company be not a little marred. How much better to say: 'Well, that is a subject I know nothing about: I will not undertake to judge.' Supposing all who are present to be in the same predicament, they might dismiss the barren subject, and start another on which some one could throw real light, and from which, accordingly, all might derive some benefit.

Is not this habit of pronouncing without preparation in inquiry and reflection just one of the causes of that remarkable diversity of opinion which is so often deplored for its unpleasant consequences? In ignorance—fancy, whim, and prejudice usurp the directing power. If we take no time for consideration, we shall be apt to plunge into an error, and afterwards persevere in it for the sake of consistency, or because it has become a thing which we regard as our own. In such circumstances, no wonder there are as many 'minds' as 'men.' But when any one can speak on the ground of well-ascertained facts, and after some deliberation on the bearings of the question, he must carry others with him, not by fascination, but by real conviction, and thus greatly reduce the proportion of opinions to men. Very likely, some other man has got hold of a somewhat different range of facts, and come to different conclusions: he, too, will have his party of followers. But there being two or three discrepant views on the subject, is a much less evil than there being as many as there are individuals.

The right of pronouncing upon public affairs is one that would be particularly clung to if there were any danger of its being lost, and it certainly is not in England that any writer would be found ready to challenge so valued a privilege. At the same time, no one will seriously deny, that if this right were used more generally with the advantage of a tolerable knowledge of the subject, it would be an improvement. Public men may be acting, as, indeed, they must generally do, upon certain data carefully brought out by inquiry: they may judge and act amiss after all, for human judgment is fallible. But when we contrast their means of forming a judgment with those of many persons who hesitate not to pronounce upon their measures, it cannot be denied that they stand in a strong position. When we hear a bold condemnation of their acts from men who, so far from having gone through the same process of inquiry, have not even perused the

documents in which the grounds of the administrative policy were explained, can we do otherwise than smile at the pretensions of the *pseudo-judges*? Is not the frequency of this unfounded judging much more apt to harden an unlucky statesman than to make him amenable to counsel? On the other hand, when a public man finds himself and his actions criticised by men who have knowledge, he must be a hardy one indeed who can entirely disregard the judgment.

If we attentively study the progress of any man who has acquired influence over his fellow-creatures—apart from certain matters in which the feelings are mainly concerned—we shall find that he has distinguished himself by a habit of not pronouncing where he has no means of forming a judgment. Such a man has had the good sense to see and confess that he could not be expected to know many things sufficiently well to entitle him to pronounce authoritatively upon them. He has probably given some considerable share of attention to certain subjects that are of some importance to his fellow-creatures, and thus fitted himself, with regard to them, to speak with more or less decision. Never found guilty of giving a vague, crudely-formed judgment on things a hundred miles out of his way, but, on the contrary, obtaining credit occasionally for the manner in which he treats those with which he is conversant, he irresistibly acquires character and influence. Young hasty minds laugh at his taking such care not to commit himself: he is perhaps taxed with getting credit for merely looking grave and holding his tongue. But this very holding of the tongue when there is nothing to say, is, in reality, one of the greatest, though often one of the last-learned virtues. Were his merits purely negative, they would be great; tending as they do to save truth from that obscuration which a multitude of ill-formed opinions necessarily throw upon it. But we shall usually discover in such men a positive merit also in their power to illustrate and give a guiding opinion upon certain subjects of importance to public or private interests.

There is not one sentence in this little essay which may not be justly set down as mere commonplace. We acknowledge the fault; but defend it on the ground that sound and useful commonplaces require a continual refreshing and re-presentation, so many persons being, after all, unaware or forgetful of them.

On a similar ground of defence, we would take leave to remind mankind of the good old maxim, 'Hear the other party.' Familiar to most people, observed by some, there are multitudes who uniformly act as if they had never heard of it. To be quite candid, we often catch ourselves neglecting it; and always, at the best, it takes a struggle to make it a reality in our conduct. Experience, however, impresses us more and more with a sense of its being absolutely essential to the ascertainment of truth in any disputable case. There is so much bias from self-love, so much recklessness about truth in general, and so much of even a sincere faithfulness of narration, that no partial account of anything is to be trusted. It is but a small concession to the cause of truth, to wait till we hear the statement of the opposite party, or not to pronounce without it. If anything were required to prove how little this is reflected on, it would be the readiness of nearly all persons to tell their own story, without intimating the slightest doubt that it is to be implicitly received on their own shewing. One cannot walk along a street, but some friend will come up and inflict a narration, limited entirely to his own view of a case in which he is interested or aggrieved, practically ignoring that there can and must be another way of stating it. And so great is the complaisance of mankind, that no one thinks of intimating any necessity for consulting another authority before giving judgment. Here the vicious habit of thoughtless pronouncing is doubly bad, as it involves also a kind of flattery.

There are some novel doctrines and theories, which seem doomed to meet with prejudice and opposition, but which yet must have some vitality about them, seeing that they survive so much ill-treatment. It is curious to observe how little regard to the rules of reasoning is usually felt to be necessary in opposing these theories—how mere pronouncing comes to stand in their case in the stead of evidence and argument. Although they may have been brought forward as mere forms of possible truth—ideal points round which to rally the scattered forces of investigation—and only advanced as far as facts would go, and no further—you will find them denounced as visions, tending to the breach of the philosophic peace; while, on the other hand, those who oppose them, albeit on no sort of ground but a mere pronouncement of contrary opinion, obtain all the credit due to the genuine philosopher. Abstractly, it would be generally admitted that any doctrine for which a certain amount of evidence is shewn, can only be overthrown by a superior force of evidence on the other side. But practically this is of no avail. Doubt and denial are so important to philosophy, and confer such an air of superior wisdom, that merely to doubt and deny will be pretty sure to carry both the educated and the uneducated vulgar. To get a high character in that position is of course very easy. Little more than pronouncing is required. As to the respective positions of the affirmer and denier in some future time, when truth has attained the power of asserting her reign against prejudice, that is another thing.

To return to the general question—If any one be impressed by our remarks with a sense of the absurdity of pronouncing without knowledge and reflection, let him endeavour to avoid it, and he will confer a sensible benefit on society. When next he is in company, and a subject occurs to tempt him into an expression of opinion, let him pause a moment, and say to himself: 'Now, do I know anything about it—or if I know something, do I know enough—to enable me to speak without fear of being contradicted? Have I ever given it any serious reflection? Am I sure that I have an opinion about it at all? Am I sure that I entertain no prejudice on the point?' Were every one of us children of British freedom to take these precautions, there would be more power amongst us to pronounce wisely. There would be a more vigorous and healthful public opinion, and the amenity, as well as instructiveness of private society would be much increased.

#### COOLING THE AIR OF ROOMS IN HOT CLIMATES.

In our last number, allusion was made to a process for cooling the air of apartments in hot climates, with a view to health and comfort. The intolerable heat of the climate in India, during certain hours of the day, is well known to be the cause of much bad health among European settlers. By way of rendering the air at all endurable, the plan of agitating it with punkahs, hung to the roofs of apartments, the punkahs being moved by servants in attendance for the purpose, is adopted. Another plan of communicating a sensation of coolness, is to hang wet mats in the open windows. But by neither of these expedients is the end in view satisfactorily gained. Both are nothing else than make-shifts.

The new process of cooling now to be described, is founded on a scientific principle, certain and satisfactory in its operation, provided it be reduced to practice in a simple manner. The discoverer is Professor Piazzi Smyth, who has presented a minute account of it in a paper in the *Practical Mechanic's Journal* for October 1850, and also separately in a pamphlet. We invite public attention to this curious but simple invention,

of which we shall proceed to present a few principles from the pamphlet just referred to.

Mr Smyth first speaks of the uselessness of the punkah, and the danger of the wet mats. 'The wet mats in the windows for the wind to blow through, cannot be employed but when the air is dry as well as hot, and even then are most unhealthy, for although the air may feel dry to the skin, there is generally far more moisture in it than in our own climate; but the height of the temperature increasing the capacity of the air for moisture, makes that air at 80 degrees feel very dry, which at 40 degrees would be very damp. Now, one of the reasons of the lassitude felt in warm climates is, that the air expanding with the heat, while the lungs remain of the same capacity, they must take in a smaller quantity by weight, though the same by measure, of oxygen, the supporter of life; but if, in addition to the air being rarefied, it be also still further distended by the vapour of water being mixed with it, it is evident that a certain number of cubic inches by measure, or the lungs full, will contain a less weight of oxygen than ever; so little, indeed, that life can barely be supported; and we need not wonder at persons lying down almost powerless in the hot and damp atmosphere, and gasping for breath. Hence we see that any method of cooling the air for Indians, instead of adding moisture, should rather take it out of the air, so as to make oxygen predominate as much as possible in the combined draught of oxygen, azote, and a certain quantity of the vapour of water, which will always be present; and hardly any plan could be more pernicious than the favourite though dreaded one by those who have watched its results—of the wet mats. Cold air—that is, air in which the thermometer actually stands at a low reading—by reason of its density, gives us oxygen, the food of the lungs, in a compressed and concentrated form; and men can accordingly do much work upon it. But air which is merely cold to the feelings—air in which the thermometer stands high, but which merely gives us one of the external sensations of coolness—on being made by a punkah, or any other mere blowing machine, to move rapidly over our skin—or on being charged with watery vapour, or on being contrasted with previous excessive heat—such air must, nevertheless, be rarefied to the full extent indicated by the mercurial thermometer, and give us, therefore, our supply of vital oxygen in a very diluted form, and of a meagre, unsupporting, and unsatisfying consistence. . . . The *sine qua non*, therefore, for healthy and robust life in tropical countries, is air cold and dry—cold to the thermometer and dry to the hygrometer; or, in other words, dense, and containing little else than the necessary oxygen and azote, and this supplied to a room, fresh and fresh, in a continual current.'

He next goes on to describe the principle of his new plan of cooling:—'The method by which I propose to accomplish this consummation, so devoutly to be desired, is chiefly by taking advantage of the well-known property of air to rise in temperature on compression, and to fall on expansion. If air of any temperature, high or low, be compressed with a certain force, the temperature will rise above what it was before, in a degree proportioned to the compression. If the air be allowed immediately to escape from under the pressure, it will recover its original temperature, because the fall in heat, on air expanding from a certain pressure, is equal to the rise on its being compressed to the same; but if, while the air is in its compressed state, it be robbed of its acquired heat of compression, and then be allowed to escape, it will issue at a temperature as much below the original one, as it rose above it on compression. Thus the air, being at 90 degrees, will rise, if compressed to a certain quantity, to 120 degrees; if it be kept in this compressed and confined state until all the extra 30 degrees of heat have been conveyed away by radiation and conduction, and the

air be then allowed to escape, it will be found, on issuing, to be of 60 degrees of temperature. If a cooler be formed by a pipe under water, and air be forced in under a given compression at one end, and be made to pass along to the other, it may thereby, if the cooler be sufficiently extensive, be robbed of all its heat of compression; and if the apparatus is so arranged, as it easily may be, that at every stroke of the pump forcing in air at one end of the pipe, an equivalent quantity of the cooled compressed air escape from under a loaded valve at the other, there will be an intermittent stream of cooled air produced thereby, of 60 degrees Fahrenheit, in an atmosphere of 90 degrees, which may be led away in a pipe to the room desired to be cooled.'

The only difficulty to be encountered consists in the erection and working of machinery. There can be little fear on this score. We have no doubt that any London engine-maker would hit off the whole scheme of an air-cooling machine in half an hour. What is wanted is a forcing-pump wrought by a one horse or two bullock-power. This being erected and wrought outside of a dwelling, the air will be forced into a convulsion of pipe passing through a tank of water, like the worm of a still, and will issue by a check-valve at every stroke of the piston into the apartments to be cooled. Properly arranged, and with a suitable supply of water trickling through the tank, air at 90 degrees will be reduced to 60 degrees or thereabouts, which is the temperature of ordinary sitting-rooms in England. What, it may be asked, will be the expense of such an apparatus for cooling the air of a dwelling-house? We are informed that it will not be greater than that usually paid for heating with fires in this country; and if so, the expense cannot be considered a serious obstacle to the use of the apparatus. In the case of barracks for soldiers, hospitals, and other public establishments, the process will prove of such important service, that the cost, even if greater than it is likely to be, should present no obstacle to its application.

#### THE CHURCH OF THE CUP OF COLD WATER.

ONE beautiful evening, in the year 1815, the parish priest of San Pietro, a village a few miles distant from Sevilla, returned much fatigued to his little cottage, where he found his aged housekeeper, the Señora Margarita, watching for him. Notwithstanding that one is well accustomed to the sight of poverty in Spain, it was impossible to help being struck by the utter destitution which appeared in the house of the good priest; the more so, as every imaginable contrivance had been resorted to, to hide the nakedness of the walls, and the shabbiness of the furniture. Margarita had prepared for her master's supper a rather small dish of *olla-podriga*, which consisted, to say the truth, of the remains of the dinner, seasoned and disguised with great skill, and with the addition of some sauce, and a name. As she placed the savoury dish upon the table, the priest said: 'We should thank God for this good supper, Margarita; this olla-podriga makes one's mouth water. My friend, you ought to be grateful for finding so good a supper at the house of your host!' At the word host, Margarita raised her eyes, and saw a stranger, who had followed her master. Her countenance changed, and she looked annoyed. She glanced indignantly first at the unknown, and then at the priest, who, looking down, said in a low voice, and with the timidity of a child: 'What is enough for two, is always enough for three; and surely you would not wish that I should allow a Christian to die of hunger? He has not tasted food for two days.'

'A Christian! He is more like a brigand!' and Margarita left the room murmuring loudly enough to be heard.



Meanwhile, the unwelcome guest had remained standing at the door. He was a man of great height, half-dressed in rags, and covered with mud; while his black hair, piercing eyes, and carbine, gave him an appearance which, though hardly prepossessing, was certainly interesting. 'Must I go?' said he.

The priest replied with an emphatic gesture: 'Those whom I bring under my roof are never driven forth, and are never unwelcome. Put down your carbine. Let us say grace, and go to table.'

'I never leave my carbine, for, as the Castilian proverb says, "Two friends are one." My carbine is my best friend; and I always keep it beside me. Although you allow me to come into your house, and do not oblige me to leave it until I wish to do so, there are others who would think nothing of hauling me out, and, perhaps, with my feet foremost. Come—to your good health, mine host, and let us to supper.'

The priest possessed an extremely good appetite, but the voracity of the stranger soon obliged him to give up, for, not contented with eating, or rather devouring, nearly the whole of the olla-podriga, the guest finished a large loaf of bread, without leaving a crumb. While he ate, he kept continually looking round with an expression of inquietude: he started at the slightest sound; and once, when a violent gust of wind made the door bang, he sprang to his feet, and seized his carbine, with an air which shewed that, if necessary, he would sell his life dearly. Discovering the cause of the alarm, he reseated himself at table, and finished his repast.

'Now,' said he, 'I have one thing more to ask. I have been wounded, and for eight days my wound has not been dressed. Give me a few old rags, and you shall be no longer burdened with my presence.'

'I am in no haste for you to go,' replied the priest, whose guest, notwithstanding his constant watchfulness, had conversed very entertainingly. 'I know something of surgery, and will dress your wound.'

So saying, he took from a cupboard a case containing everything necessary, and proceeded to do as he had said. The stranger had bled profusely, a ball having passed through his thigh; and to have travelled in this condition, and while suffering, too, from want of food, shewed a strength which seemed hardly human.

'You cannot possibly continue your journey to-day,' said the host. 'You must pass the night here. A little rest will get up your strength, diminish the inflammation of your wound, and'—

'I must go to-day, and immediately,' interrupted the stranger. 'There are some who wait for me,' he added with a sigh—'and there are some, too, who follow me.' And the momentary look of softness passed from his features between the clauses of the sentence, and gave place to an expression almost of ferocity. 'Now, is it finished? That is well. See, I can walk as firmly as though I had never been wounded. Give me some bread: pay yourself for your hospitality with this piece of gold, and adieu.'

The priest put back the gold with displeasure. 'I am not an innkeeper,' said he; 'and I do not sell my hospitality.'

'As you will, but pardon me; and now, farewell, my kind host.'

So saying, he took the bread, which Margarita, at her master's command, very unwillingly gave him, and soon his tall figure disappeared among the thick foliage of a wood which surrounded the house, or rather the cabin. An hour had scarcely passed, when musket-shots were heard close by, and the unknown reappeared, deadly pale, and bleeding from a deep wound near the heart.

'Take these,' said he, giving some pieces of gold to his late host; 'they are for my children—near the stream—in the valley.'

He fell, and the next moment several police-officers rushed into the house. They hastily secured the unfortunate man, who attempted no resistance. The priest entreated to be allowed to dress his wound, which they permitted; but when this was done, they insisted on carrying him away immediately. They would not even procure a carriage; and when they were told of the danger of removing a man so severely wounded, they merely said: 'What does it matter? If he recovers, it will only be to receive sentence of death. He is the famous brigand, José!'

José thanked the intercessor with a look. He then asked for a little water, and when the priest brought it to him, he said in a faint voice: 'Remember!' The reply was merely a sign of intelligence. When they were gone, notwithstanding all Margarita could say as to the danger of going out at night, the priest crossed the wood, descended into the valley, and soon found, beside the body of a woman, who had doubtless been killed by a stray ball of the police, an infant, and a little boy of about four years old, who was trying in vain to awaken his mother. Imagine Margarita's amazement when the priest returned with two children in his arms.

'May all good saints defend us! What have you done, señor? We have barely enough to live upon, and you bring two children! I suppose I must beg from door to door, for you and for them. And, for mercy's sake, who are these children? The sons of that brigand, gipsy, thief, murderer, perhaps! I am sure they have never been baptised!' At this moment the infant began to cry. 'And pray, Señor Clérigo, how do you mean to feed that child? You know very well that we have no means of paying a nurse. We must spoon-feed it, and nice nights that will give me! It cannot be more than six months old, poor little creature,' she added, as her master placed it in her arms. 'Fortunately, I have a little milk here; and forgetting her anger, she busied herself in putting some milk on the fire, and then sat down beside it to warm the infant, who seemed half-frozen. Her master watched her in silence, and when at last he saw her kiss its little cheek, he turned away with a quiet smile.

When at length the little one had been hushed into a gentle slumber, and when Margarita, with the assistance of her master's cloak, and some of her own clothes, had made a bed for the elder boy, and placed him in it, the good man told her how the children had been committed to his care, and the promise he had made, though not in words, to protect them.

'That is very right and good, no doubt,' said Margarita; 'I only want to know how we are all to live?' The priest opened his Bible, and read aloud:

'Whosoever shall give to drink unto one of these little ones a cup of cold water only in the name of a disciple, verily I say unto you, he shall in no wise lose his reward.'

'Amen!' said Margarita.

Twelve years passed by. The parish priest of San Pietro, who was now more than seventy years old, was sitting in the sunshine at his door. Near him, a boy of about twelve years old was reading aloud from the Bible, looking occasionally towards a tall, fine-looking young man, who was hard at work in a garden close by. Margarita, who was now become blind, sat and listened. Suddenly, the sound of wheels was heard, and the boy exclaimed: 'Oh! the beautiful carriage!' A splendid carriage approached rapidly, and stopped before the door. A richly-dressed servant approached, and asked for a cup of water for his master.

'Carlos,' said the priest to the younger boy, 'go, bring water to the gentleman; and add some wine, if he will accept it. Go quickly!' At this moment, the carriage-door opened, and a gentleman, apparently about fifty years old, alighted.

'Are these your nephews?' said he to the priest.

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'They are more than that, señor; they are my children—the children of my adoption.'

'How is that?'

'I will tell you, señor; for I am old and poor, and know but little of the world, and am in much need of advice; for I know not what to do with these two children.' He related the story we have just told.

'And now, señor, what do you advise me to do?'

'Apply to one of the nobles of the court, who must assign you a pension of four thousand ducats.'

'I asked you for advice, señor, and not for jest.'

'And then, your church must be rebuilt. We will call it the Church of the Cup of Cold Water. Here is the plan. See, this is to be the vicarage; and here, divided by this paling'—

'What does this mean? What would you say? And, surely, I remember that voice, that face'—

'I am Don José della Ribeira; and twelve years ago, I was the brigand José. I escaped from prison; and—for the revolution made great changes—am now powerful. My children'—

He clasped them in his arms. And when at length he had embraced them a hundred times, with tears, and smiles, and broken sentences; and when all had in some degree recovered their composure, he took the hand of the priest and said: 'Well, father, will you not accept the Church of the Cup of Cold Water?' The old man, deeply affected, turned to Margarita, and repeated:

'Whoever shall give to drink unto one of these little ones a cup of cold water only in the name of a disciple, verily I say unto you, he shall in no wise lose his reward.'

'Amen!' replied the aged woman, her voice tremulous from emotion.

A short time afterwards, Don José della Ribeira and his two sons were present at the consecration of the church of San-Pietro-del-Vaso-di-Aqua-Fria, one of the prettiest churches in the neighbourhood of Sevilla.

#### MUSIC-GRINDERS OF THE METROPOLIS.

PERHAPS the pleasantest of all the out-door accessories of a London life are the strains of fugitive music which one hears in the quiet by-streets or suburban high-ways—strains born of the skill of some of our wandering artists, who, with flute, violin, harp, or brazen tube of various shape and designation, make the brick-walls of the busy city responsive with the echoes of harmony. Many a time and oft have we lingered entranced by the witchery of some street Orpheus, forgetful, not merely of all the troubles of existence, but of existence itself, until the strain had ceased, and silence aroused us to the matter-of-fact world of business. One blind fiddler, we know him well, with face upturned towards the sky, has stood a public benefactor any day these twenty years, and we know not how much longer, to receive the substantial homage of the music-loving million. But that he is scarcely old enough, he might have been the identical Oxford-Street Orpheus of Wordsworth:—

'His station is there; and he works on the crowd,  
He sways them with harmony merry and loud;  
He fills with his power all their hearts to the brim—  
Was aught ever heard like his fiddle and him!'

Decidedly not—there is nothing to match it; and so thinks 'the one-pennied boy' who spares him his one penny, and deems it well bestowed. Then there are the harpers, with their smooth French-horn-breathing and piccolo-piping comrades, who at the soothing hour of twilight affect the tranquil and retired paved courts or snug enclosures far from the roar and rumble of chariot-wheels, where, clustered round with lads and

lasses released from the toils of the day, they dispense romance and sentiment, and harmonious cadences, in exchange for copper compliments and the well-merited applause of fit audiences, though few. Again, there are the valorous brass-bands of the young Germans, who blow such spirit-stirring appeals from their travel-worn and battered tubes—to say nothing of the thousand performers of solos and duets, who, wherever there is the chance of a moment's hearing, are ready to attempt their seductions upon our ears to the prejudice of our pockets. All these we must pass over with this brief mention upon the present occasion; our business being with their numerous antitheses and would-be rivals—the incarnate nuisances who fill the air with discordant and fragmentary mutilations and distortions of heaven-born melody, to the distraction of educated ears and the perversion of the popular taste.

'Music by handle,' as it has been facetiously termed, forms our present subject. This kind of harmony, which is not too often deserving of the name, still constitutes, notwithstanding the large amount of indisputable talent which derives its support from the gratuitous contributions of the public, by far the larger portion of the peripatetic minstrelsy of the metropolis. It would appear that these grinders of music, with some few exceptions which we shall notice as we proceed, are distinguished from their praiseworthy exemplars, the musicians, by one remarkable, and to them perhaps very comfortable characteristic. Like the exquisite Charles Lamb—if his curious confession was not a literary myth—they have ears, but no ear, though they would hardly be brought to acknowledge the fact so candidly as he did. They may be divided, so far as our observation goes, into the following classes:—1. Hand-organists; 2. Monkey-organists; 3. Handbarrow-organists; 4. Handcart-organists; 5. Horse-and-cart-organists; 6. Blindbird-organists; 7. Piano-grinders; 8. Flageolet-organists and pianists; 9. Hurdy-gurdy players.

1. The hand-organist is most frequently a Frenchman of the departments, nearly always a foreigner. If his instrument be good for anything, and he have a talent for forming a connection, he will be found to have his regular rounds, and may be met with any hour in the week at the same spot he occupied at that hour on the week previous. But a man so circumstanced is at the head of the vagabond profession, the major part of whom wander at their own sweet will wherever chance may guide. The hand-organ which they lug about varies in value from £10 to £150—at least, this last-named sum was the cost of a first-rate instrument thirty years ago, such as were borne about by the street-organists of Bath, Cheltenham, and the fashionable watering-places, and the grinders of the West End of London at that period, when musical talent was much less common than it is now. We have seen a contract for repairs to one of these instruments, including a new stop and new barrels, amounting to the liberal sum of £75: it belonged to a man who had grown so impudent in prosperity, as to incur the penalty of seven years' banishment from the town in which he turned his handle, for the offence of thrashing a young nobleman, who stood between him and his auditors too near for his sense of dignity. Since the invention of the metal reed, however, which, under various modifications and combinations, supplies the sole utterance of the harmonicon, celestina, seraphina, colophon, accordion, concertina, &c. &c. and which does away with the necessity for pipes, the street hand-organ has assumed a different and infinitely worse character. Some of them yet remain what the old Puritans called 'boxes of

whistles'—that is, they are all pipes; but many of them might with equal propriety be called 'boxes of Jews-harps,' being all reeds, or rather vibrating metal tongues—and more still are of a mixed character, having pipes for the upper notes, and metal reeds for the bass. The effect is a succession of sudden hoarse brays as an accompaniment to a soft melody, suggesting the idea of a duet between Titania and Bottom. But this is far from the worst of it. The profession of hand-organist having of late years miserably declined, being in fact at present the next grade above mendicancy, the element of cheapness has, per force, been studied in the manufacture of the instrument. The barrels of some are so villainously pricked that the time is altogether broken, the ear is assailed with a minim in the place of a quaver, and *vice versa*—and occasionally, as a matter of convenience, a bar is left out, or even one is repeated, in utter disregard of suffering humanity. But what is worse still, these metal reeds, which are the most untunable things in the whole range of sound-producing material, are constantly, from contact with fog and moisture, getting out of order; and how dolorously as they will in token of their ailments, their half-starved guardian, who will grind half an hour for a penny, cannot afford to medicate their pains, even if he is aware of them, which, judging from his placid composure during the most infamous combination of discords, is very much to be questioned.\*

2. The monkey-organist is generally a native of Switzerland or the Tyrol. He carries a worn-out, doctored, and flannel-swathed instrument, under the weight of which, being but a youth, or very rarely an adult, he staggers slowly along, with outstretched back and bended knees. On the top of his old organ sits a monkey, or sometimes a marmoset, to whose queer face and queerer tricks, he trusts for compensating the defective quality of his music. He dresses his shivering brute in a red jacket and a cloth cap; and, when he can, he teaches him to grind the organ, to the music of which he will himself dance wearily. He wears an everlasting smile upon his countenance, indicative of humour, natural and not assumed for the occasion; and though he invariably unites the profession of a beggar with that of monkey-master and musician, he has evidently no faith in a melancholy face, and does not think it absolutely necessary to make you thoroughly miserable in order to excite your charity. He will leave his monkey grinding away on a door-step, and follow you with a grinning face for a hundred yards or more, singing in a kind of recitative: 'Date qualche cosa, signor! per amor di Dio, eccellenza, date qualche cosa!' If you comply with his request, his voluble thanks are too rapid for your comprehension; and if you refuse, he laughs merrily in your face as he turns away to rejoin his friend and coadjutor. He is a favourite subject with the young artists about town, especially if he is very good-looking, or, better still, excessively ugly; and he picks up many a shilling for sitting, standing, or sprawling on the ground, as a model in the studio. It sometimes happens that he has no organ—his monkey being his only stock in trade. When the monkey dies—and one sees by their melancholy comicalities, and cautious and painful grimaces, that the poor brutes are destined to a short time of it—he takes up with white mice, or, lacking these, constructs a dancing-doll, which, with the aid of a short

plank with an upright at one end, to which is attached a cord passing through the body of the doll, and fastened to his right leg, he keeps constantly on the jig, to the music of a tuneless tin-whistle, bought for a penny, and a very primitive parchment tabor, manufactured by himself. These shifts he resorts to in the hope of retaining his independence and personal freedom—failing to succeed in which, he is driven, as a last resource, to the comfortless drudgery of piano-grinding, which we shall have to notice in its turn.

3. The handbarrow-organist is not uncommonly some lazy Irishman, if he be not a sickly Savoyard, who has mounted his organ upon a handbarrow of light and somewhat peculiar construction, for the sake of facilitating the task of locomotion. From the nature of his equipage, he is not given to grinding so perpetually as his heavily-burdened brethren. He cannot of course grind, as they occasionally do, as he travels along, so he pursues a different system of tactics. He walks leisurely along the quiet ways, turning his eyes constantly to the right and left, on the look-out for a promising opening. The sight of a group of children at a parlour-window brings him into your front garden, where he establishes his instrument with all the deliberation of a proprietor of the premises. He is pretty sure to begin his performance in the middle of a tune, with a hiccupping kind of sound, as though the pipes were gasping for breath. He puts a sudden period to his questionable harmony the very instant he gets his penny, having a notion, which is tolerably correct, that you pay him for his silence and not for his sounds. In spite of his discordant gurglings and squealings, he is welcomed by the nursery-maids and their infant tribes of little sturdy rogues in petticoats, who flock eagerly round him, and purchase the luxury of a half-penny grind, which they perform *con amore*, seated on the top of his machine. If, when your front garden is thus invaded, you insist upon his decamping without a fee, he shews his estimate of the peace and quietness you desiderate by his unwillingness to retire, which, however, he at length consents to do, though not without a muttered remonstrance, delivered with the air of an injured man. He generally contrives to house himself as night draws on in some dingy taproom, appertaining to the lowest class of Tom-and-Jerry shops, where, for a few coppers and 'a few beer,' he will ring all the changes on his instrument twenty times over, until he and his admiring auditors are ejected at midnight by the police-fearing landlord.

4. The handcart-organists are a race of a very different and more enterprising character, and of much more lofty and varied pretensions. They generally travel in firms of two, three, or even four partners, drawing the cart by turns. Their equipage consists of an organ of very complicated construction, containing, besides a deal of very marvellous machinery within its entrails, a collection of bells, drums, triangles, gongs, and cymbals, in addition to the usual quantity of pipes and metal-reeds that go to make up the travelling organ. The music they play is of a species which it is not very easy to describe, as it is not once in a hundred times that a stranger can detect the melody through the clash and clangor of the gross amount of brass, steel, and bell-metal put in vibration by the machinery. This, however, is of very little consequence, as it is not the music in particular which forms the principal attraction: if it serve to call a crowd together, that is sufficient for their purpose; and it is for this reason, we imagine, that the effect of the whole is contrived to resemble, as it very closely does, the hum and jangle of Greenwich Fair when heard of an Easter Monday from the summit of the Observatory Hill. No, the main attraction is essentially dramatic. In front of the great chest of heterogeneous sounds there is a stage about five or six feet in width, four in height, and perhaps eighteen inches or two feet in depth. Upon

\* Among some of the continental nations, Justice, though blind, is not supposed to be deaf; she has, on the contrary, a musical ear, and compels the various grinders of harmony to keep their instruments in tune, under the penalty of a heavy fine. In some of the German cities, the police have summary jurisdiction in offences musical, and are empowered to demand a certificate, with which every grinder is bound to be furnished, showing the date of the last tuning of his instrument. If he perpetrate false harmony, and his certificate be run out, he is mulcted in the fine. Such a by-law would be a real bonus in London.



this are a variety of figures, about fourteen inches long, gorgeously arrayed in crimson, purple, emerald-green, blue, and orange draperies, and loaded with gold and tinsel, and sparkling stones and spangles, all doubled in splendour by the reflection of a mirror in the background. The figures, set in motion by the same machinery which grinds the incomprehensible overture, perform a drama equally incomprehensible. At the left-hand corner is Daniel in the lion's den, the lion opening his mouth in six-eight time, and an angel with outspread wings, but securely transfixed through the loins by a revolving brass pivot, shutting it again to the same lively movement. To the right of Daniel is the Grand Turk, seated in his divan, and brandishing a dagger over a prostrate slave, who only ventures to rise when the dagger is withdrawn. Next to him is Nebuchadnezzar on all fours, eating painted grass, with a huge gold crown on his head, which he bobs for a bite every other bar. In the right-hand corner is a sort of cavern, the abode of some supernatural and mysterious being of the fiend or vampire school, who gives an occasional fitful start, and turns an ominous-looking green glass-eye out upon the spectators. All these are in the background. In the front of the stage stands Napoleon, wearing a long sword and cocked hat, and the conventional gray smalls—his hand of course stuck in his breast. At his right are Tippoo Saib and his sons, and at his left, Queen Victoria and Prince Albert. After a score or so of bars, the measure of the music suddenly alters—Daniel's guardian angel flies off—the prophet and the lion lie down to sleep together—the Grand Turk sinks into the arms of the death-doomed slave. Nebuchadnezzar falls prostrate on the ground, and the fiend in the gloomy cavern whips suddenly round and glares with his green eye, as if watching for a spring upon the front row of actors, who have now taken up their cue and commenced their performance. Napoleon, Tippoo Saib, and Queen Victoria, dance a three-handed reel, to the admiration of Prince Albert and a group of lords and ladies in waiting, who nod their heads approvingly—when br'r'r! crack! bang! at a tremendous crash of gongs and grumbling of bass-notes, the fiend in the corner rushes forth from his lair with a portentous howl. Away, neck or nothing, flies Napoleon, and Tippoo scampers after him, followed by the terrified attendants; but lo! at the precise nick of time, Queen Victoria draws a long sword from beneath her stays, while up jumps the devouring beast from the den of the prophet, and like a true British lion—as he doubtless was all the while—flies at the throat of the fiend, straight as an arrow to its mark. Then follows a roar of applause from the discriminating spectators, amidst which the curtain falls, and, with an extra flourish of music, the collection of copper coin commences. This is always a favourite spectacle with the multitude, who never bother themselves about such trifles as anachronisms and unities; and the only difficulty the managers have to overcome in order to insure a remunerative exhibition, is that of finding a quiet locality, which shall yet be sufficiently frequented to insure them an audience. There are equipages of this description of very various pretensions and perfection, but they all combine the allurements of music and the drama in a greater or less degree.

5. The horse-and-cart-organists are a race of enterprising speculators, who, relying upon the popular penchant for music, have undertaken to supply the demand by wholesale. It is impossible by mere description to impart an adequate idea of the truly appalling and tremendous character of their performances. Their machines are some of them vast structures, which, mounted upon stout wheels, and drawn by a couple of serviceable horses, might be mistaken for wild-beast vans. They are crammed choke-full with every known mechanical contrivance for the production of ear-stunning noises. Wherever they burst forth into

utterance, the whole parish is instantly admonished of their whereabouts, and, with the natural instinct of John Bull for a row—no matter how it originates—forth rushes the crowd to enjoy the dissonance. The piercing notes of a score of shrill fifes, the squall of as many clarions, the hoarse bray of a legion of tin trumpets, the angry and fitful snort of a brigade of rugged bassoons, the unintermitting rattle of a dozen or more deafening drums, the clang of bells firing in peals, the boom of gongs, with the sepulchral roar of some unknown contrivance for bass, so deep that you might almost count the vibrations of each note—these are a few of the components of the horse-and-cart-organ, the sum-total of which it is impossible to add up. Compared to the vicinity of a first-rater in full blow, the inside of a menagerie at feeding-time would be a paradise of tranquillity and repose. The rattle and rumble of carts and carriages, which drive the professors and possessors of milder music to the side-streets and suburbs, sink into insignificance when these cataraacts of uproar begin to peal forth; and their owners would have no occasion to seek an appropriate spot for their volcanic eruptions, were it not that the police, watchful against accident, have warned them from the principal thoroughfares, where serious consequences have already ensued through the panic occasioned to horses from the continuous explosion of such unwonted sounds. In fact, an honourable member of the Commons' House of Parliament made a motion in the House, towards the close of the last session, for the immediate prohibition of these monster nuisances, and quoted several cases of alarm and danger to life of which they had been the originating cause. These formidable erections are for the most part the property and handiwork of the men who travel with them, and who must levy a pretty heavy contribution on the public to defray their expenses. They perform entire overtures and long concerted pieces, being furnished with spiral barrels, and might probably produce a tolerable effect at the distance of a mile or so—at least we never heard one yet without incontinently wishing it a mile off. By a piece of particular ill-fortune, we came one day upon one undergoing the ceremony of tuning, on a piece of waste-ground at the back of Coldbath Prison. The deplorable wail of those tortured pipes and reeds, and the short savage grunt of the bass mystery, haunted us, a perpetual day-and-night-mare, for a month. We could not help noticing, however, that the jauntily-dressed fellow, whose fingers were covered with showy rings, and ears hung with long drops, who performed the operation, managed it with consummate skill, and with an ear for that sort of music most marvellously discriminating.

6. Blind bird-organists. Though most blind persons either naturally possess or soon acquire an ear for music, there are yet numbers who, from the want of it or from some other cause, never make any proficiency as performers on an instrument. Blindness, too, is often accompanied with some other disability, which disqualifies its victims for learning such trades as they might otherwise be taught. Hence many, rather than remain in the workhouse, take to grinding music in the streets. Here we are struck with one remarkable fact: the Irishman, the Frenchman, the Italian, or the Savoyard, at least so soon as he is a man, and able to lug it about, is provided with an instrument with which he can make a noise in the world, and prefer his clamorous claim for a recompense; while the poor blind Englishman has nothing but a diminutive box of dilapidated whistles, which you may pass fifty times without hearing it, let him grind as hard as he will. It is generally nothing more than an old worn-out bird-organ, in all likelihood charitably bestowed by some compassionate Poll Sweetlepipies, who has already used it up in the education of his bull-finches. The reason, we opine, must be that the major part, if not the whole, of the peripatetic instruments of the metropolis are the

property of speculators, who let them out on hire, and that the blind man, not being considered an eligible customer, is precluded from the advantage of their use. However this may be, the poor blind grinder is almost invariably found furnished as we have described him, jammed up in some cranny or corner in a third-rate locality, where, having opened or taken off the top of his box, that the curious spectator may behold the mystery of his too quiet music—the revolving barrel, the sobbing bellows, and the twelve leaden and ten wooden pipes—he turns his monotonous handle throughout the live-long day, in the all but vain appeal for the commiseration of his fellows. This is really a melancholy spectacle, and one which we would gladly miss altogether in our casual rounds.

7. The piano-grinders are by far the most numerous of the handle-turning fraternity. The instrument they carry about with them is familiar to the dwellers in most of the towns in England. It is a miniature cabinet-piano, without the keys or finger-board, and is played by similar mechanical means to that which gives utterance to the hand-organ; but of course it requires no bellows. There is one thing to be said in favour of these instruments—they do not make much noise, and consequently are no very great nuisance individually. The worst thing against them is the fact, that they are never in tune, and therefore never worth the hearing. After grinding for twelve or fourteen hours a day for four or five years, they become perfect abominations; and luckless is the fate of the poor little stranger condemned to perpetual companionship with a villainous machine, whose every tone is the cause of offence to those whose charity he must awaken into exercise, or go without a meal. These instruments are known to be the property of certain extensive proprietors in the city, some of whom have hundreds of them grinding daily in every quarter of the town. Some few are let out on hire—the best at a shilling a day; the old and worn-out ones as low as two or three pence; but the great majority of them are ground by young Italians shipped to this country for the especial purpose by the owners of the instruments. These descendants of the ancient Romans figure in Britain in a very different plight from that of their renowned ancestors. They may be encountered in troops sallying forth from the filthy purlieus of Leather Lane, at about nine or ten in the morning, each with his awkward burden strapped to his back, and supporting his steps with a stout staff, which also serves to support the instrument when playing. Each one has his appointed beat, and he is bound to bring home a certain prescribed sum to entitle him to a share in the hot supper prepared for the evening meal. We have more than once, when startled by the sound of the everlasting piano within an hour of midnight, questioned the belated grinder, and invariably received for answer, that he had not yet been able to collect the sum required of him. Still there can be no doubt that some of them contrive to save money; inasmuch as we occasionally see an active fellow set up on his own account, and furnished with an instrument immensely superior to those of his less prosperous compatriots. So great is the number of these wandering Italian pianists, that their condition has attracted the attention of their more wealthy countrymen, who, in conjunction with a party of benevolent English gentlemen, have set on foot an association for the express purpose of imparting instruction to poor Italians of all grades, of whom the vagabond musicians form the largest section.

It is easy to recognise the rule adopted in the distribution of the instruments among the grinders: the stoutest fellow, or he who can take the best care of it, gets the best piano; while the shattered and rickety machine goes to the urchin of ten or twelve, who can scarcely drag it a hundred yards without resting. It is to be supposed that the instruments are all rated according to their quality. There is at this moment

wandering about the streets of London a singular and pitiable object, whose wretched lot must be known to hundreds of thousands, and who affords in his own person good evidence of the strictness of the rule above alluded to, as well as of the rigour with which the trade is carried on. We refer to a ragged, shirtless, and harmlessly insane Italian lad, who, under the guardianship of one of the piano-mongers, is driven forth daily into the streets, carrying a blackened and gutted old piano-case, in which two strings only of the original scale remain unbroken. The poor unwashed innocent transports himself as quickly as possible to the genteel neighbourhood he can find, and with all the enthusiasm of a Julien, commences his monotonous grind. Three turns of the handle, and the all but defunct instrument ejaculates 'tink'; six more inaudible turns, and then the responding string answers 'tank.' 'Tink—tank' is the sum-total of his performance, to any defects in which he is as insensible as a blind man is to colour. As a matter of course, he gets ill-treated, mobbed, pushed about, and upset by the blackguard scamps about town; and were it not for the police, who have rescued him times without number from the hands of his persecutors, he would long ere now have been reduced to as complete a ruin as his instrument. In one respect, he is indeed already worse off than the dilapidated piano: he is dumb as well as silly, and can only utter one sound—a cry of alarm of singular intensity; this cry forms the climax of pleasure to the wretches who dog his steps, and this, unmoved by his silent tears and woful looks, they goad him to shriek forth for their express gratification. We have stumbled upon him at near eleven at night, grinding away with all his might in a storm of wind and rain, perfectly unconscious of either, and evidently delighted at his unusual freedom from interruption.

8. Flageolet-organists and pianists. It is a pleasure to award praise where praise is due, and it may be accorded to this class of grinders, who are, to our minds, the elite of the profession. We stated above that some of the piano-grinders contrive, notwithstanding their difficult position, to save money and set up for themselves. It is inevitable that the faculty of music must be innate with some of these wandering pianists, and it is but natural that these should succeed the best, and be the first to improve their condition. The instrument which combines a flageolet-stop with a piano is generally found in the possession of young fellows who, by dint of a persevering and savage economy, have saved sufficient funds to procure it. Indeed, in common hands, it would be of less use than the commonest instrument, because it requires frequent—more than daily—tuning, and would therefore be of no advantage to a man with no ear. Unless the strings were in strict unison with the pipes, the discordance would be unbearable, and as this in the open air can hardly be the case for many hours together, they have to be rectified many times in the course of a week. As might be reasonably supposed, these instruments are comparatively few. When set to slow melodies, the flageolet taking the air, and the piano a well-arranged accompaniment, the effect is really charming, and there is little reason to doubt, is found as profitable to the producer as it is pleasing to the hearer. They are to be met with chiefly at the west end of the town, and on summer evenings beneath the lawyers' windows in the neighbourhood of some of the Inns of Court.

9. The hurdy-gurdy player. We have placed this genius last, because, though essentially a most horrid grinder, he, too, is in some sort a performer. In London, there may be said to be two classes of them—little hopping, skipping, jumping, reeling Savoyard or Swiss urchins, who dance and sing, and grind and play, doing, like Cæsar, four things at once, and whom you expect every moment to see rolling on the pavement, but who continue, like so many kittens, to pitch on

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their feet at last, notwithstanding all their antics—and men with sallow complexions, large dark eyes, and silver ear-rings, who stand erect and tranquil, and confer a dignity, not to say a grace, even upon the performance of the hurdy-gurdy. The boys for the most part do not play any regular tune, having but few keys to their instruments, often not even a complete octave. The better instruments of the adult performers have a scale of an octave and a half, and sometimes two octaves, and they perform melodies and even harmonies with something like precision, and with an effect which, to give it its due praise, supplies a very tolerable caricature of the Scotch bagpipes. These gentry are not much in favour either with the genuine lovers of music or the lovers of quiet, and they know the fact perfectly well. They hang about the crowded haunts of the common people, and find their harvest in a vulgar jollification, or an extempore 'hop' at the door of a suburban public-house on a summer night. There are a few old-women performers on this hybrid machine, one of whom is familiar to the public through the dissemination of her *cera effigies* in a contemporary print.

The above are all the grinders which observation has enabled us to identify as capable of classification. The reader may, if he likes, suppose them to be the metropolitan representatives of the nine Muses—and that, in fact, in some sort they are, seeing that they are the embodiments to a certain extent of the musical tastes of a section at least of the inhabitants of London; though, if we are asked which is Melpomene? which is Thalia? &c. &c. we must adopt the reply of the showman to the child who asked which was the lion and which was the dog, and received for answer: 'Which-ever you like, my little dear.'

With respect to all these grinders, one thing is remarkable: they are all, with the exception of a small savour of Irishmen, foreigners. Scarcely one Englishman, not one Scot, will be found among the whole tribe; and this fact is as welcome to us as it is singular, because it speaks volumes in favour of the national propensity, of which we have reason to be proud, to be ever doing something, producing something, applying labour to its legitimate purpose, and not turning another man's handle to grind the wind. Yet there is, alas! a scattered and characteristic tribe of vagabond English music-grinders, and to these we must turn a moment's attention ere we finally close the list. We must call them, for we know no more appropriate name, cripple-grinders. It is impossible to carry one's explorations very far through the various districts of London without coming upon one or more samples of this unfortunate tribe. Commerce maims and mutilates her victims as effectually as war, though not in equal numbers; and men and lads without arms, or without legs, or without either, and men doubled up and distorted, and blasted blind and hideous with gunpowder, who have yet had the misfortune to escape death, are left without limbs or eyesight, often with shattered intellects, to fight the battle of life, at fearful odds. Had they been reduced to a like miserable condition while engaged in killing their fellow-creatures on the field of battle or on the deck of carnage, a grateful country would have housed them in a palace, and abundantly supplied their every want; but they were merely employed in procuring the necessities of life for their fellows in the mine or the factory, and as nobody owes them any gratitude for that, they must do what they can. And behold what they do: they descend, being fit for nothing else, to the level of the foreign music-grinder, and, mounted on a kind of bed-carriage, are drawn about the streets of London by their wives or children; being furnished with a blatant hand-organ of last century's manufacture, whose ear-torturing growl draws the attention of the public to their woful plight, they extort that charity which

would else fail to find them out. If there be something gratifying in the fact, that this is the only class of Britons who follow such an inglorious profession, there is nothing very flattering in the consideration, that even these are compelled to it by inexorable necessity.

#### A VOICE FROM THE DIGGINGS.

THE voices that have come from the diggings in California and Australia have hitherto been so loud and so many, that they have served only to confuse. We have the image before our fancy of a vast crowd of human beings hastening over seas and deserts towards certain geographical points, where they meet, struggle, fix. We see them picking up lumps of gold from the surface, or digging them out of the earth, or collecting the glittering dust by sifting and washing; and then we hear of vast torrents of the precious metal finding their way into Europe, threatening to swamp us all with absolute wealth, and confound and travesty the whole monetary transactions of the world. What we don't see, is the gold itself. We should like, if it were only out of curiosity, to feel a handful of it in our pocket: but we grope in vain. A sovereign costs twenty shillings, as before; and twenty shillings are as hard to come at as ever. Nevertheless, we believe in the unseen presence of that slave-genius, who lends himself, with a sickly smile, to the service of mankind, and buys when we think he is sold! We have faith in bills of lading, and accept without question any amount that is reported to lie dormant in the reservoir of the Bank of England: only we wonder in private whether the importations of the precious metal are likely to increase permanently in greater proportion than the population in this quarter of the globe, and the spread of taste, comfort, and luxury, calling every day new arts into existence, perfecting old ones, and distributing wealth throughout the constantly widening circle of talent and industry.

But our present business is with the diggings and the diggers. We have often wished we could interrogate one of those unquiet spirits in the manner of Macbeth—'What is't ye do?' How do you manage? By what signs do you know a locality that is likely to repay your pains? What are your instruments, your machinery? What do you conceive to be the prospects of your singular trade? And, in fact, our curiosity is at this moment to a certain extent gratified: a Voice has been wafted across the ocean to our private ear, and, undisturbed by the thousand other tongues of the diggings, we can listen to an account, distinct so far as it goes, of the whole process of gold-hunting. The voice emanates from Mr S. Rutter, of Sydney, whose experience has lain both in the Californian and Australian mines, and we propose putting together, in as intelligible a way as we can, the rough hints with which we have been favoured.

Mr Rutter, on the 24th of May last, left Sydney for the Ophir diggings, with a party, including himself, of four individuals. A sleeping partner remained behind, whose duty it was to furnish the means of conveyance for the first trip; but the four travellers entered with each other into a more precise agreement, the chief articles of which we give, as being common in such adventures:—

I. We solemnly agree to stand by each other in all circumstances.

II. Each man is to come provided with firearms.

III. The capital is to be contributed equally, or credit given, as may be agreed to by the majority.

IV. The profit or loss to be equally divided.

V. In the event of death or disablement occurring to any of the party, his share of the stock and profits is to be immediately handed over to his friends.

On this paction being signed, the party set forth,

provided with £100 worth of goods, a cart and a team of horses, and reached Paramatta, a distance of eighteen miles, the first night, although they were obliged to send back one of the horses, which had proved to be useless. Here Mr Rutter slept in a bed for the last time during four months; and the next day, having purchased another horse, and sold some of their goods to lighten the wagon, they set forth again towards evening. The road was nothing more than a dray-track, to which the horses were unequal; and after proceeding a few miles, they were detained at the village of Prospect for a week, till one of the partners had returned to Sydney, and brought back a pair of bush-horses and a new cart. As they proceeded the next day, they found the track over which they travelled become more and more populous; till, on crossing the Macquarrie, they encamped in the midst of thirteen teams of cattle and their thirteen companies, all bound upon the same errand as themselves.

On the 12th of June, in the dusk of the evening, they reached the summit of a hill overlooking their destination. The Summerhill Creek lay before them, with the camp-fires of fifty or sixty huts; and as they descended into the midst, the inhabitants of this village of the desert were returning from work with laughter and rude merriment. After pitching their camp, and taking some refreshment, they proceeded anxiously to inquire the news; and that night they turned in with no very bright anticipations, after learning that the creek was high and goods low, the weather alternating between rain and frost, the mines overcrowded, and superfluous hands deserting them fast. They struggled for awhile against these evil auguries; they even contrived, with great labour, to pick up an ounce or two of gold; but at length, losing heart, the party broke up on the 23d, and all went home but one adventurer.

His geological and mechanical knowledge enabled him to obtain a partnership with another band of gold-hunters then at work; and after spending some days in prospecting on account of the new concern, he found 'a chink he liked the look of,' which appeared to have been partially worked. Licences were accordingly taken out, the commissioner being on the spot, and forty-five feet of frontage to the creek were marked off. As soon as the river became a little lower, they began in earnest to dig a race for turning the course of the water. Their pump was made and fixed ready to drain; a dam was emptied; six ounces of gold were obtained as an earnest of what they might expect; and then it began to rain, and the creek to roar, and the whole of their machinery was swept away.

Here was a new mishap: but these things will happen in the diggings; and so our adventurers, agreeing to pay the commissioner a monthly licence for their ground, intending to return in the dry weather to work it, removed bag and baggage to another part of the river. Here they dug away, but it appears with no tempting success; and they took care to return to the commissioner in time, as they thought, to implement their monthly bargain. On tendering the money for their licence, however, they discovered that they were just half an hour too late, and that the functionary had disposed of their forty-five feet to another bidder. What to do now? They fell in with a man, an old friend of Mr Rutter, just setting off on a journey of sixty-two miles to the north, where he told them a piece of gold had been found weighing 106 lbs. This invaluable man they instantly took into partnership, and purchasing fresh horses, they struck their camp, and followed their new companion across the country, in search of a place called the Devil's Hole, near the World's End. It is no wonder they lost their way. As there was no such thing as a road, they were obliged to transport their goods on the horses' backs; and the interesting nature of their journey may be guessed at from the fact, that they had to cross a

creek with steep banks sixteen times in the course of five miles.

They at length reached the Louisa Diggings, near those quartz-ridges where, in fact, a 106 lb. lump of gold had been found. They encamped in the dark; and getting up betimes the next morning, looked eagerly out on this land of promise. It was a dull, dreary morning, and a heavy continuous rain plashed upon the earth. About 200 persons were taking the air in this watery atmosphere, their dress and movements corresponding well with the aspect of the hour. Some were covered with an old sack, some with a blanket, some with a dripping cloak, but all glided slowly about in the rain, with a stick in their hands, and their eyes fixed upon the ground. These phantoms were gold-hunters; and the silent company was immediately joined by our adventurers, who glided and poked like the rest. The ground was new, and during two days gold was obtained in this way, from a particle the size of a pin's head to a lump of nearly an ounce. When the surface was exhausted, digging commenced; but the soil was too tough for the common cradle, and although rich in gold, it would not repay the trouble of washing. Upon this, the company broke up, each pursuing his own way; and our adventurer and another agreed to go down the country together to Maitland, prospecting on the way.

The place where the large mass of gold was found is an intersection between two quartz-ridges, rising from a high table-land in the midst of a congeries of mountains, offshoots from the range that extends from Wilson's Point, on the south, to Cape York, on the north. The clay soil covers many acres below and around the ridges, and wherever it was prospected by our adventurer, gold was found. On the 12th of September, he reached Maitland; and here he found a letter awaiting him, which determined him to choose a new hunting-ground. Some years before, it seems, a man he knew, who was at that time a shepherd in the Wellington District, while crossing the country on his master's business, lost his way in the gullies, and did not find it again for two days. While sitting down, in his dilemma, on a quartz-rock, he observed something glittering beside him, and breaking off with his tomahawk a piece of the stone, he carried it home with him as a curiosity. At home it lay for years, till the reported discoveries of gold induced him to offer it for sale to a goldsmith in Sydney. The result was, that he connected himself with a party of adventurers, and they all set forth for the place where he had rested among the gullies. His companions proved treacherous; and when they had come sufficiently near to be able, as they thought, to find the spot without his assistance, they turned him adrift. They sought the golden rock for three days—but in vain; and he went back to Sydney, to invite Mr Rutter to accompany him. Here ends our narrative for the present; and a most instructive one it is. The search for gold, our informant tells us plainly, is a mere lottery, its results depending almost wholly upon chance. Plenty as the metal is, it frequently costs twenty shillings the sovereign's worth; and, in short, we are at that point of transition when the mania is dying away, and the science has not begun. When capital and skill are brought to bear upon the process of mining in Australia, it will become a regular, though by no means a miraculously profitable business; and even at present, steady labouring-men may spread themselves over thousands of miles of the auriferous creeks, if they will be satisfied with a profit of seven or eight shillings a day.

According to his experience, the place to look for gold is in the neighbourhood of distinct traces of volcanic action, or in small streams coming direct from hills of volcanic formation, or rivers fed by these streams. An abundance of quartz (commonly called

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spar) is universally reckoned an indication of the presence of gold; and if trap-rock is found cropping up amid this quartz, and perforated with streaks of it, so much the better. Sometimes the solid quartz itself is pounded, and gold extracted by the aid of quicksilver. When the gold is found in rivers, or on their banks, prediction is vain: nothing will do but the actual trial by the wash-pan. But where there is a bar or sand-bank, the richest deposit will always be on the side of the bank presented to the descending stream. The metal in such digging is almost invariably found in small spangles, that appear to have been granular particles crushed or rolled flat by some enormous pressure. In California, these spangles were the beginning of the gold-finding. When the streams and their banks were well searched, the crowds of adventurers tried, in desperation, what they could do by digging deep holes in the plains; and there the metal was found in such different forms as to indicate quite a different process of deposition. Some of these holes were productive—although it was severe labour to dig fifteen or eighteen feet through a hard soil merely as an experiment; and in the course of time the plains were covered with tents. The influx of adventurers continued; and the old diggers, dissatisfied with gains that seemed to the new prodigious, retired further and further back, and began to grope in the terraces on the sides of volcanic hills, and among the detritus of extinct craters. Here the harvest was rich, and as the crowning effort of the gold-passion, unassisted by machinery, they actually in some cases cut away the sides of the hills! 'My own impression is,' concludes our informant on this subject, 'that, both in California and Australia, the chances of individual enterprise, and even of small companies, are decreasing rapidly; but that when the mines so wrought have ceased to pay, capital and machinery, directed by science, will receive profitable employment for ages to come.'

The wash-pan we have mentioned may be of tin, if not required to be used with quicksilver, otherwise of copper or wood; but of whatever material made, it should be some 15 inches in diameter at the top, 10 or 11 at the bottom, and 5, or 5½ inches deep. The manner of using this is learned only by practice and observation, and consists in a peculiar motion, by which the heavier substances sink to the bottom and remain there, while the soluble and lighter parts are washed out. The principal use of the wash-pan is in rewashing the partially washed 'stuff' taken from the rocker, and in prospecting to ascertain by trial the value of a new place.

This rocker, or cradle, may be made of half-inch softwood, and consists of a trough 10 inches deep, 18 inches broad, and 4 feet long, closed at the broad end, and open at the other; with a transverse bar at the upper part, two feet from the broad end, to receive the tray. This machine is placed on rockers, like a cradle, and deposited so near the water that, when at work, the man who rocks with his left hand may be able to reach the water with a small tin baler, provided with a wooden handle two feet long. A bucketful of the earth to be washed is thrown into the tray, and the person who is to rock the cradle taking a bateful of water, throws it uniformly on the mass in the tray, and keeps rocking and washing till the gold becomes obvious. These are the simpler implements of gold-hunting; and provided with them, the little company of adventurers pitch their tent and continue to dig, till they come to earth they think will pay for washing. The next morning, they get up perhaps at daylight, for the sake of the coolness of the hour, and pass through the sieve ten or fifteen buckets before breakfast. After breakfast, all hands resume work till about twelve o'clock, when they dine, then rest through the heat of the day till three o'clock, and go on again till dark. They usually divide the work as follows: one in the hole

digs, fills the bucket with earth, and, if necessary, bales the water out of the hole; another takes the bucket and empties it into the tray of the machine; while a third rocks, supplies the machine with water, and empties the tray of the large stones. This, it will be seen, is no child's play: your gold-hunter is no idle wanderer, but a hard-working man, subjected to a thousand discomforts unknown in civilised life.

The quicksilver cradle is a more complicated and expensive machine, requiring six men instead of three to work it. It is understood, however, to save at least 20 per cent. of the metal, and indeed to be indispensable in some places in California, where the gold is in too fine particles to be detected by the common rocker. Quicksilver has so strong an affinity for gold, that the minutest particle of the latter having once touched, it is deprived of the possibility of escape; and when the process of washing has been completely gone through, the whole mass of gold particles will be found bound together by the quicksilver into a compact lump, in size and shape often resembling an egg. The gold is thus obtained in the form of an amalgam; but the quicksilver is easily evaporated, if its loss be of no consequence, or separated without loss by a more scientific process.

We have more than once used the word *prospecting*, which, we believe, is peculiar to this kind of mining. The deposits of gold are so capricious, that the adventurers, in order to lose as little time as possible in removing from place to place, detach one of their number on the hunt for a mine—and this is called prospecting. He sets out with a few provisions, a rifle, a pick and shovel, at all events, with a pan and large knife; and on reaching some hopeful-looking locality, he makes experiments on the soil by washing. The considerations that determine his calling the company to the spot are of course influenced by the circumstance of their having a common or a quicksilver cradle. He calculates the average value of the gold he finds in several panfuls of the soil at different depths; and he takes into account the distance it has to be carried for washing, the means of transit there exist, and how far off is the nearest store. The prospector, therefore, is a very important member of the concern, and in many cases the success of the adventure depends upon his experience and sagacity.

#### THE HISTORY OF JANE A POOLE.

In the latter part of the fourteenth century, an incident occurred in the family of the Earl of Suffolk, which affords a curious illustration of old manners in England. We shall follow the account of the circumstance, given in a manuscript in the British Museum.

Sir Michel Poole, second Earl of Suffolk, had several sons and daughters. First was Mighell, son and heir; then William, second son; and afterwards ten additional olive branches, of diverse names and both sexes—all of whom, however, died, and went down unmarried to the cold tomb. Some fell off like ripped blossoms in their infancy; convents and wars absorbed the rest, till only the eldest two were left of all that numerous family to perpetuate the name of Poole, and raise the fortunes of the race. In due course of time, Sir Mighell married Elizabeth, daughter of the right noble knight, Thomas Duke of Norfolk; and these together had two children, Jane and Katharine, but, alas! no son. Years passed on, and the hope of an heir was at an end; but before that hope was quite laid aside, the tragedy of the house began.

Jane, as yet heiress and darling, a round, bright, wilful cherub, beautiful and loving, but mighty in her passionate force, and indomitable in her infant will, beyond all power of control—the one most cared for,



and on whom was anchored such a rich argosy of hopes and first fond love—was one day given into the safe keeping of Maud, a young serving-girl, a rough, untutored peasant-girl, who was one of the underwomen to the bower-maidens. The king was coming to the castle that night, and every female finger that could work was employed on the last stitches of a dainty tapestry-bed, which was to receive His Majesty as became his lordly dignity. Even the mother's care must give way to the housewife's duty; even love must yield to loyalty.

Left alone in an upper apartment with her young charge, Maud became weary of confinement, and resolved at all hazards to descend to the great hall, and have her share of the general amusement. Down, accordingly, she went. Jane, of course, accompanied her, and, contrary to orders, was allowed to romp about at pleasure. The day was cold, and the fire burned brightly in the open hearth. Nearer and nearer the little one crept to the blazing logs, watching the sparks fly up in a golden shower when the crackling masses fell to the ground, or when some rough soldier struck them with his mailed hand. No one looked to her while she played by the open hearth, and tried to seize the vivid sparks; once only, a trooper caught her roughly back; but again she stole towards the great blazing logs, and this time she was less fortunate. Suddenly, a cry was heard. Jane's clothes were in flames. Maud extinguished them as she best could. She crushed the burning with her hands in such haste as she might make; but, alas! to what a wreck had the fire reduced the child! Her long fair hair was withered to its roots; her pretty eyes were closed, and the curling lashes scorched to the skin; her pure neck was blackened and blistered; and, a mass of pain and sore, she lay like a dead thing, but for the wailing moans which shewed her sad title yet to a ruined existence. Alas for her that she did not die! Wo, that life was so strong in her now, when, blemished and disfigured for ever, she might not hold its honours or taste its joys!—now, when she must endure a worse thing than death for the sake of her family name! 'Therefore,' says the chronicle, 'she was in a manner loathed of her parents, and kept forth secretly from the common knowledge of the people.'

'The house of Poole must have no charred mummy for its heiress,' said old Dame Katharine; and Sir Mighell and his lady bowed their heads and acquiesced.

It was agreed, then, that she should be sent to a house of 'close nuns,' to be made a woman of religion, and so kept out of the sight of all men's eyes. With this view, she was brought up; taught nothing else; suffered to hope for nothing else; suffered to speak of nothing else. But they could not bind her thoughts; and by a strange perversity of will, these went always to the open fields and the unfettered limb, to the vague picturing of freedom, and the dreamy forecast of love. Yet she kept her peace; not daring to tell her mind to any, and nourishing all the more strongly, because in silence, the characteristics which destroyed the charm of a conventual life. When she came to the years of discretion, she was to be professed; but, in accordance with an old custom, before her profession she required to enter the world for a season, that her 'vocation' might be judged of, whether it were true or not, or simply the effect of education on the one hand, and of ignorance on the other; and thus, when she was fifteen years of age, she was dismissed to her father's house for the space of six months' nominal trial, after which time she must return to the convent for ever.

Now, Dame Katharine a Poole, Jane's paternal grandmother, was a fierce, proud old woman, whose heart was set on the creation of her son's house, and whose very virtue was her family pride. When she heard of Jane's return to the outer world of men, she

hastily rode over to see this ugly, despised thing, and to take her from her father's castle to the grim quiet of her own dungeon-like home, if so be that she was as unlovely as report had spoken her. They met; and for a moment the proud old dame was struck as by death. The seamed and scarred face, the closed eyes—one perfectly sightless, the other well-nigh so—the burnt and withered hair growing in long, ragged patches only, the awkward gait and downcast look; all were like daggers in Dame Katharine's heart; and 'she rebuked her greatly, seeing that she was too loathly for any gentleman who was equal to her in birth.'

Poor Jane bore all these coarse reproaches with much outward meekness; but the spirit which they woke up in her was little interpreted by the drooping head and tearful eyes. A fiery demon, breathing rage and vowing revenge, took such meek-seeming as this, and blinded the old grandam to the mischief she was working, until it was too late to repair it. Dame Katharine took the girl home; Sir Mighell and his wife consenting in gratitude to be so well delivered from such a heavy burden. Dame Elizabeth, the girl's mother, truly shed a few tears, quickly dried; and so young Jane parted for ever from her father's house.

Like a dead thing, revived by the fresh winds of heaven, Jane's comparative freedom aroused in her the most passionate abhorrence of the life to which she was destined, and the most passionate desire for liberty and affection. With each breath she drew by the open casement, with each glance cast into the depths of the dark woods beyond, rose up the strong instincts of her age, and turned her for ever from the convent gate. In vain the dame insisted; Jane stood firm; and declared that she would still refuse, at the very altar, to take the vow. Yet was she timid in all things but those of love and liberty; and Dame Katharine, by violence and threats, so worked on her fears, that she at last consented, amid grievous tears and bitter reproaches, to be deprived of her name and state, and given forth to the castle people as a poor gentlewoman, godchild to the dame.

'Anything for freedom!' sighed Jane, as she took the oath of secrecy. 'Any deprivation rather than that living tomb of the nun!'

It was now the dame's chief care to be rid of her charge. She cast about for suitors, but even the lowest squire shook his head at the offer. At last, she married her grandchild to the son of an honest yeoman of Suffolk, and so sent her forth to take her place in the world as the wife of a common peasant, and the mother of a family of peasants. Such was the fate allotted to Jane a Poole, daughter of the proud Earl of Suffolk!

Of her issue, we need say but little. Suffice it to know, that Jane and her ploughman William had four children, three sons and one daughter; of whom William, the second son, married an honest man's daughter, whose name was Alice Gryse, and whose children were living in 1490, when this chronicle was written.

Return we now to the puissant lord, Sir Mighell, Earl of Suffolk. He was not long suffered to enjoy his home; indeed, so ardent a soul as his would have eaten its way through his castle walls, as a chrysalis through its silken tomb, if he had been long inactive. If war had not been his duty, he must have made it his crime; if foreign foes had not called upon his valour, too surely would domestic friends have suffered from his disloyalty. Born for the fight, he would have fulfilled his destiny by force if he might not by right. At the battle of Agincourt (1415), he perished along with many other of England's nobles.

Sir Mighell having died without a son, his titles and estates went to his brother, Sir William. Dame Elizabeth, widow of Sir Mighell, and her daughter Katharine, shortly afterwards, as was usual in these

times, went to reside in the Abbey of Brasenode; and there they ultimately died.

Meanwhile, and for years afterwards, no one knew anything of Jane, who, though exiled from her rank and family, perhaps enjoyed more real happiness than those who had been guilty of her maltreatment. At length, her husband died, which was a source of grief. Honest William had thought her queer in manners; but he loved her for all that, and was proud of her, as the daughter of a poor gentleman. He blessed her on his death-bed; and she remained a widow for his sake. Many yemen wished to marry her, but she refused them all. This went on for many years—long after Sir William a Poole had become fourth Earl of Suffolk, and had had children born to him; long after Alice Gryse had become Jane's daughter-in-law, and made her more than once a grandmother too; and then the whole of this strange story became known. Jane had kept her vow of secrecy with perfect fidelity; never had she breathed a syllable to her husband or children as to the family to which she belonged. It was only, late in life, through confession she made to a priest, that who and what she had been was revealed. Shocked with the depravity of her unnatural parents, this pious and learned doctor, says the chronicle, 'commanded her to publish this account to her children and their issues, that they might know of what race they came, if so be, by the great mercy of Providence, they might claim their own again. And not only to them, but also to make it known to all men, as far as was consistent with her own safety; for he said, that the great power of Almighty God should be published to all the world. For this reason was the chronicle written—that all men might take warning; for no deed of wickedness is done in the dark, which shall not be dragged forth to the light; and no oppression on the innocent shall prosper before the right hand of Eternal Justice.'

#### THINGS TALKED OF IN LONDON.

March 1832.

THE lecture experiment at the Museum of Practical Geology, in Jernyn Street, has proved eminently successful. There were a thousand more applications for tickets than could be supplied, in consequence of which the executive very wisely determined, that the course should be repeated until the demand was satisfied. This fact of numbers speaks highly in favour of the working-men of London—none others are admitted to the course here referred to; and once having got the knowledge, it is to be hoped they will be able to turn it to good account. One of the lecturers told me, that the hall is always crowded, and that a better-behaved auditory has seldom been seen in any quarter, which we may consider to be an encouraging sign of the times. The other courses are also going on for those who are able to pay high fees, and attend during the day. The titles of a few of the lectures will give you an idea of the nature of the instruction offered; namely—The Relations of Natural History to Geology and the Arts; On the Value of an Extended Knowledge of Mineralogy and the Processes of Mining; On the Science of Geology and its Applications; On the Importance of Special Scientific Knowledge to the Practical Metallurgist; and On the Importance of Cultivating Habits of Observation. You must remember, that the institution is a government school of mines as well as a museum of geology.

In connection with this, it may be mentioned that the Society of Arts are discussing a project for the 'affiliation' of all the literary, philosophical, scientific, and mechanics' institutions throughout the kingdom, with a view to render them less languid and more beneficial than too many of them now are. Unity of purpose effected wonders with the Great Exhibition; and it is thought that the same cause should produce

a similar result in the educational and recreative establishments alluded to. There is a talk, also, of an assembling of most of the learned societies of our great city under one roof—a sort of Palace of Science, which has long been wanting in London, but which has long existed in Paris. Should this scheme be carried out, the philosophers might then adopt Brother Jonathan's motto—*E pluribus unum*. And, next, the Suburban Artisan School of Drawing and Modelling, established last year at Camden-Town, has succeeded so well that the committee, with Prince Albert as patron, have determined to establish four additional schools in our other suburban districts. These schools are to be open every evening for instruction, at a charge per month of 2s. No working-man in the metropolis after this need be ignorant of drawing. Then, again, a 'Department of Practical Art' is organised in connection with the Board of Trade, which, by means of travelling and stationary superintendents, and other officers, is to assist in the development of artistic talent, and its application to useful purposes, wherever it may be found.

Co-operation of some sort or other is the order of the day; and now a good deal of attention is excited by the announcement of an 'Athenæum Institute for Authors and Artists,' something different from the Guild of Literature and Art set afoot last winter, the object being to endeavour to form an incorporated association of the two classes mentioned—for course for their common benefit. The aid of the possessors of rank and wealth is to be asked at starting, because, as the promoters say, 'we think literature has a right to ask the assistance of these other two great powers of society, because it so materially assists them; and because, in many of its branches, it has no other mode of being paid by society. The severely scientific, the highly imaginative, the profoundly legislative authors, do not produce promptly marketable, though they produce priceless, works. La Place, Wordsworth, Bentham, could not have existed had they depended on the first product of their works; they would have perished before an acknowledging world could have given them bread.' They say, further, that 'the humblest literary man works for something more than hire, and produces something more effective than a mere piece of merchandise. His book is not only sold to the profit of the bookseller, but to the benefit of the public. The publisher pays for its mercantile value, but the public should reward the author for its moral and social effect, as they take upon themselves to punish, if it have an evil tendency.'

Whether the promoters are right or wrong in their views, will be best proved by the result; meantime, they put forth some good names as provisional president, vice-president, and managers, and propose that the Institute shall comprise four branches—namely, a Protective Society, a Philanthropic and Provident Fund, an Educational Association, and a Life-Assurance Department. The subscribers are to consist of two classes: those who give contributions for the benefit of the Institute, and those who seek to benefit themselves. The former are to be asked to insure their lives, for different rates of premium, the amounts to fall into the corporation at the decease of the subscribers; and thus a fund would be raised out of which, on certain conditions, participating subscribers would be able to secure a provision for old age, or premature decay of mental power, the means of educating their children, and leaving a *solution* to their widows. If all this can be carried out, and if literary men, as a class, are capable of all that the prospectus of the new scheme implies, how much of distress and heart-breaking misery will be saved to society!

There are several subjects which, having recently been brought before our Horticultural Society, have somewhat interested gardening folk. At one of the meetings,

there was exhibited 'a very fine specimen of common mignonette,' which 'was stated to have been a single plant pricked out into a pot in January 1851, and shifted on until it had attained a large size. It was mentioned, that mignonette is not an annual, as many imagine it to be; but that it will become a woody shrub, and last for years, provided it is well managed, and kept free from frost and damp.' So runs the report in the society's journal.

There was, likewise, an exhibition of black Hamburg grapes by Mr Fry, a Kentish gardener, who made thereupon some observations, which appear to be deserving of wider circulation. The grapes were grown in a building seldom heated artificially, and were much attacked by mildew during the last two seasons, on which prompt measures were taken to diffuse perfectly dry 'sulphur vivum' throughout the house by means of a sulphurator, until fruit and foliage were completely but lightly coated. 'Fires were lighted, and the temperature kept up to from 80 to 90 degrees, ventilation being considerably diminished, and water in any form discontinued. After being subject to this treatment for about four or five days, the vines received a thorough syringing, which cleansed them from every particle of sulphur. With respect to the use of sulphur in killing mildew, many ladies and gentlemen,' adds Mr Fry, 'with whom I have conversed, consider it highly objectionable: they say, that they do not like the idea of eating sulphur with grapes; neither would any one, and I can prove to them that this need never be done; and, moreover, that the use of sulphur, when timely and judiciously applied, does not in any way deteriorate the fruit. I much question if the most practised eye could detect sulphur on the grapes exhibited, although they have been twice covered with it; and as to the mildew itself among vines, I fear it no more than I do green-fly among cucumbers, which is so soon deprived of existence by the fumes of tobacco.'

What is called 'a French sulphurator,' whose great merit appears to be 'simplicity and cheapness,' was also exhibited. It is described as 'a tin box for holding the sulphur, placed on the upper side of the pipe of a pair of common bellows. The sulphur gets into the pipe through small holes made for the purpose in the bottom of the box, and, in order that no stoppage may take place, a small hammer-head attached at the end of a slight steel-spring, is fixed on the under side of the bellows, a gentle tap from which, now and then, keeps up a continuous fall of sulphur into the pipe.' It is said, that 'these appliances, which may be attached to a pair of bellows for little more than sixpence, answer every purpose for which they are intended, equally as well as a more expensive machine.'

At the same time with this contrivance, some bunches of black Prince Grapes were shewn to the assembled horticulturists, which could only be preserved from mildew by frequent applications of sulphur. The bunches are to be afterwards cleaned by dipping in water, or what is considered preferable, 'syringing on all sides with a fine syringe,' which process, it is well to remember, disturbs the bloom on the fruit least when directed 'downwards, or obliquely, as rain would fall.'

As the season for gardening operations is coming on, Mr Rivers' account may be mentioned of his mode of growing strawberries in pots; it will be found to involve certain combinations opposed to ordinary practice. 'About the second week in July,' he says, he filled a number of six-inch pots 'with a compost of two-thirds loam, and one-third rotten dung, as follows: three stout pieces of broken pots were placed in the bottom, and a full handful of the compost put in; a stout wooden pestle was then used with all the force of a man's arm to pound it, then another handful and a pounding, and another, till the pot was brimful, and the compressed mould as hard as a barn-floor. The pots were then

taken to the strawberry-bed, and a runner placed in the centre of each, with a small stone to keep it steady. They were watered in dry weather, and have had no other care or culture. For two or three years, I have had the very finest crops from plants after this method, and those under notice promise well. If the pots are lifted, it will be apparent that a large quantity of food is in a small space. I may add, that from some recent experiments with compressed earth to potted fruit-trees, I have a high opinion of its effect, and I fully believe that we have yet much to learn on the subject.'

There is a committee sitting at the Admiralty, to devise a method for the uniform lighting of ships and steamers at night, the object being to diminish the chances of accident or error to vessels at sea. And apropos of this, Mr Babbage has published a plan which will effectually prevent one lighthouse being mistaken for another: it is, that every lighthouse, wherever situated, shall have a number—the numbers not to run consecutively—and no two adjoining lights to have the same numeral digits in the same place of figures. There would then be no need for revolving or flashing lights, as the only thing to be done would be to make each lighthouse repeat its own number all night long, or whenever it was illuminated. This is to be 'accomplished by enclosing the upper part of the glass cylinders of the argand burner by a thin tube of tin or brass, which, when made to descend slowly before the flame, and then allowed suddenly to start back, will cause an occultation and reappearance of the light.' The number of occultations denotes the number of the lighthouse. For instance, suppose the Eddystone to be 243, the two is denoted by two hidings of the light in quick succession; a short pause, and four hidings; another short pause, and three hidings, followed by a longer pause; after which the same process is repeated. It would not be easy to make a mistake, for the numbers of the lighthouses nearest to the Eddystone would be very different; and supposing that the boy sent aloft to watch for the light were to report 253 instead of 243, without waiting to correct his view, the captain, by turning to his book, would perhaps find that No. 253 was in the Straits of Sunda, or some equally remote situation, and would easily recognise the error. When we take into account the number of vessels lost by mistaking one lighthouse for another, the value of this proposal becomes apparent. Mr Babbage shews, that bell-strokes might be employed to announce the number of a beacon in foggy weather; and he believes that the time is not far distant when buoys will also be indicated by a light. Now that lighthouse dues are to be reduced one-half, we may hope to see improvement in more ways than one.

This is but a small part of what promises more and more to become a great question—that of navigation. It is felt that, in these go-ahead days, we must be paying not less attention to our maritime than to our inland arm of commerce; and this has brought the question of wood *versus* iron ships again into prominent notice. The advocates of iron shew that the dry-rot, so destructive to wood, cannot enter metal; that lightness and speed, those prime essentials, are insured by the use of iron; that iron ships are safer, more easily repaired, and cheaper than vessels built of wood; and that they are more lasting. The chief objection hitherto has been the liability of iron to become foul in tropical climates; but this now appears to be in a measure overcome. According to Mr Lindsay: 'An admixture has been applied, termed "Anti-Sargassum Paint," which has been found to answer the purpose better than any yet discovered. From the experience of its properties, we cannot say that in itself it is yet sufficient; but it appears a fair substitute till some other preparation is discovered. A gentleman at Glasgow,' he adds, 'has already discovered a compound, which, being mixed in a fluid state with the iron, is

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expected to answer the desired purpose. There is another disadvantage which will soon be overcome—the greater liability to error in the compasses of iron ships; an error which, however, also occurs, though perhaps to a less extent, in every wooden ship. By a most ingenious invention, which will shortly be made public, such errors in any ships, under any circumstances, can at all times be at once detected.

An important patented process for producing tapered iron, has been explained before the Franklin Institute at Philadelphia—one by which every variety of taper may be produced, or combinations of taper, with flat or other forms; and seeing how much tapered iron is used on railways, in many kinds of machinery, in ships and steamers, the subject may be considered worthy of more than a mere passing notice. Tapered iron is a form to which machinery has been thought inapplicable, and only to be produced by hand-labour. The new method, however, which has been successfully carried into practice at the Phoenixville Ironworks, is thus described: 'The principle on which it acts is that of hydrostatic pressure, or, more properly, *hydrostatic resistance*. A small chamber, similar to that of the common hydrostatic press, is set on the top of each housing; the closed end of the press being uppermost, and a plunger entering from below; but instead of water being forced into the press, the chamber is at first filled with water, and the pressure of the iron in passing between the rollers, tends to lift the top one, which is held down by the plunger. An escape-pipe, provided with a valve, is inserted into the top of the chamber. When any upward pressure acts on the top roller, it is communicated by the plunger to the water, which escapes through the valve, and the roller rises.

'When the valve is partially closed, the water escapes more slowly; and the rise of the roller, and consequently the taper of the iron, are more gradual.

'Any rate of taper may thus be had by regulating the rise of the opening of the escape-valve. If the water is all driven out before the bar is entirely through the rollers, the top roller ceases to rise, and the iron becomes parallel from that point. Then, if the ends of the bar be reversed, and it be again passed between the rollers, the parallel portion will become tapered; thus we can get a bar.'

At the same time, a 'Thermometrical Ventilator' was exhibited, which is described as circular in form, with a well-balanced movable plate. 'Upon the side of the valve is an inverted syphon, with a bulb at one end, the other being open; the lower part of the tube contains mercury; the bulb, atmospheric air. An increase of temperature expands the air in the bulb, drives the mercury down one side and up the other, thereby destroying the balance, and causing the valve to open by turning on its axis. A diminution of temperature contracts the air in the bulb, causes the mercury to rise in the side of the tube, and closes the valve.' Besides this, there was 'an improved magneto-electric machine, for medical use, with a new arrangement, by which the shock is graduated by means of a glass tube, in which a wire is made to communicate with water, so as to produce at first a slight shock; by gradually pressing down the wire attached to a spiral spring, the shock is received in its full force.'

It now appears that Mr Robertson of Brighton claims priority of discovery touching the boring power of *Pholades*. His statements are founded on daily observation of the creatures at work for three months. 'The *Pholades daetylus*,' he says, 'makes its hole by grating the chalk with its rasp-like valves, licking it up, when pulverised, with its foot, forcing it up through its principal or bronchial syphon, and squirting it out in oblong nodules. The crypt protects the *Pholades* from confusæ, which, when they get at it, grow not merely outside, but even within the lips of the valves, preventing the action of the syphons. In the foot there is a gelatinous

spring or style, which, even when taken out, has great elasticity, and which seems the mainspring of the motions of the *Pholades daetylus*.'

At last, steam communication with Australia seems about to become a reality, for the first vessel is announced to start in May for Sydney, to touch at the Cape and other colonies on her way out; and accommodation is promised for two hundred passengers of different classes. There is also a project on foot for a line of steamers from Panama to Australia, and to Valparaiso, which, if brought into operation, will make a voyage round the world little more than a bagman's journey. Apropos of Australia, Mr Clarke, who first predicted that gold would be found in that country, says, 'that just 90 degrees west of the auriferous range in Australia, we find an auriferous band in the Urals; and just 90 degrees west of the Urals, occur the auriferous mountains of California.' A speculation for cosmogonists. In our own country, we are finding metalliferous deposits: vast accumulations of lead-ore have come to light in Wales, which are said to contain six ounces of silver, and fifteen hundredweight of lead to the ton; and in Northamptonshire, an abundant and timely supply of iron-ore has just been met with. We might perhaps turn our metallic treasures to still better account, if some one would only set to work and win the prize offered by Louis Napoleon; namely, 'a reward of 50,000 francs to such person as shall render the voltaic pile applicable, with economy, to manufactures, as a source of heat, or to lighting, or chemistry, or mechanics, or practical medicine.' The offer is to be kept open for five years, to allow full time for experiment, and people of all nations have leave to compete. One of the electric telegraph companies intends to ask parliament to abolish the present monopoly as regards the despatch of messages; in another quarter, an under-sea telegraph to Ostend is talked about, with a view to communicate with Belgium independently of France; and there is no reason why it should not be laid down, for the Dover and Calais line is paying satisfactorily. And, finally, another ship-load of 'marbles' and sculptures has just arrived from Nineveh; and the appointment of Mr Layard as Under-Secretary for Foreign Affairs (though now but temporary) is regarded as a praiseworthy recognition of his merits and services; and now that we have a government which combines a few *littérateurs* among its members, it is thought that literature will be relieved of some of its trammels.

#### CHILDREN'S JOYS AND SORROWS.

I can endure a melancholy man, but not a melancholy child; the former, in whatever slough he may sink, can raise his eyes either to the kingdom of reason or of hope; but the little child is entirely absorbed and weighed down by one black poison-drop of the present. Think of a child led to the scaffold, think of Cupid in a Dutch coffin; or watch a butterfly, after its four wings have been torn off, creeping like a worm, and you will feel what I mean. But wherefore? The first has been already given; the child, like the beast, only knows present, though shortest sorrow; one which has no past and no future; one such as the sick man receives from without, the dreamer from himself into his æsthetic brain; finally, one with the consciousness not of guilt, but of innocence. Certainly, all the sorrows of children are but shortest nights, as their joys are but hottest days; and indeed both so much so, that in the latter, often clouded and starless time of life, the matured man only longingly remembers his old childhood's pleasures, while he seems altogether to have forgotten his childhood's grief. This weak remembrance is strangely contrasted with the opposing one in dreams and fevers in this respect, that in the two last it is always the cruel sorrows of childhood which return; the dream this mock-sun of childhood—and the fever, its distorting glass—both draw forth from dark corners the fears of

defenceless childhood, which press and cut with iron fangs into the prostrate soul. The fair scenes of dreams mostly play on an after-stage, whereas the frightful ones choose for theirs the cradle and the nursery. Moreover, in fever, the ice-hands of the fear of ghosts, the striking one of the teachers and parents, and every claw with which fate has pressed the young heart, stretch themselves out to catch the wandering man. Parents, consider then, that every childhood's Rupert—the name given in Germany to the fictitious being employed to frighten children into obedience—even though it has lain chained for tens of years, yet breaks loose and gains mastery over the man so soon as it finds him on a sick-bed. The first fright is more dangerous the sooner it happens: as the man grows older, he is less and less easily frightened; the little cradle or bed-canopy of the child is more easily quite darkened than the starry heaven of the man.—*Jean Paul Richter.*

#### A REJECTED LOVER.

You 'never loved me,' Ada!—Those slow words  
Dropped softly from your gentle woman's tongue,  
Out of your true and tender woman's heart,  
Dropped—piercing into mine like very swords,  
The sharper for their brightness! Yet no wrong  
Lies to your charge; nor cruelty, nor art;  
Even while you spoke, I saw the ready tear-drop start.

You 'never loved me!'—No, you never knew—  
You, with youth's dew yet glittering on your soul—  
What 'tis to love. Slow, drop by drop, to pour  
Our life's whole essence, perfumed through and through  
With all the best we have, or can control,  
For the libation; cast it down before  
Your feet—then lift the goblet, dry for evermore!

I shall not die, as foolish lovers do:  
A man's heart beats beneath this breast of mine;  
The breast where—Curse on that fiend's whispering,  
'It might have been!'—Ada, I will be true  
Unto myself—the self that worshipped thine.  
May all life's pain, like those few tears that spring  
For me—glance off as rain-drops from my white dove's  
wing!

May you live long, some good man's bosom-flower,  
And gather children round your matron knees!  
Then, when all this is past, and you and I  
Remember each our youth but as an hour  
Of joy—or torture; one, serene, at ease,  
May meet the other's grave yet steadfast eye,  
Thinking, 'He loved me well!'—clasp hands, and so  
pass by.

#### THE TEARS OF OYSTERS.

Glancing round this anatomical workshop (the oyster), we find, amongst other things, some preparations shewing the nature of pearls. Examine them, and we find that there are dark and dingy pearls, just as there are handsome and ugly men; the dark pearl being found on the dark shell of the fish, the white brilliant one upon the smooth inside shell. Going further in the search, we find that the smooth, glittering lining, upon which the fish moves, is known as the *nacre*, and that it is produced by a portion of the animal called the *mantle*; and, for explanation's sake, we may add that gourmards practically know the mantle as the beard of the oyster. When living in its glossy house, should any foreign substance find its way through the shell to disturb the smoothness so essential to its case, the fish coats the offending substance with nacre, and a pearl is thus formed. The pearl is, in fact, a little globe of the smooth, glossy substance yielded by the oyster's beard; yielded ordinarily to smooth the narrow home to which his nature binds him, but yielded in round drops, real pearls, if he is hurt. When a beauty glides among a throng of her admirers, her hair clustering with pearls, the little thinks

that her ornaments are products of pain and diseased action, endured by the most unpoetical of shell-fish.—*Leisure Hours.*

#### 'ROBESPIERRE'

In our recent notice of Robespierre, it was mentioned that, at the period of his capture in the Hôtel de Ville, he was shot in the jaw by a pistol fired by one of the gendarmes. Various correspondents point to the discrepancy between this account and that given by Thiers, and some other authorities, who represent that Robespierre fired the pistol himself, in the attempt to commit self-destruction. In our account of the affair, we have preferred holding to Lamartine's statement (*History of the Girondists*), not only in consequence of his being the latest and most graphic authority on the subject, but because his statement seems to be verified by the appearance of the half-signed document which it was our fortune to see in Paris in 1849.

The following is Lamartine's statement:—'The door soon yielded to the blows given by the soldiers with the butt-end of their muskets, amid the cries of "Down with the tyrant!" "Which is he?" inquired the soldiers; but Léonard Bourdon durst not meet the look of his fallen enemy. Standing a little behind the men, and hidden by the body of a gendarme, named Méda; with his right hand he seized the arm of the gendarme who held a pistol, and pointing with his left hand to the person to be aimed at, he directed the muzzle of the weapon towards Robespierre, exclaiming: "That is the man." The man fired, and the head of Robespierre dropped on the table, deluged with blood the proclamation he had not finished signing.' Next morning, adds this authority, Léonard Bourdon 'presented the gendarme who had fired at Robespierre to the notice of the Convention.' Further: on Robespierre being searched while he lay on the table, a brace of loaded pistols were found in his pocket. 'These pistols, shut up in their cases still loaded, abundantly testify that Robespierre did not shoot himself.' Accepting these as the true particulars of the incident, Robespierre cannot properly be charged with an attempt at suicide.

In the article referred to, the name Barras was accidentally substituted for Henriot, in connection with the insurrectionary movement for rescuing Robespierre. Barras led the troops of the Convention.

A correspondent asks us to state what was the actual number of persons slaughtered by the guillotine, and otherwise, during the progress of the Revolution. The question cannot be satisfactorily answered. Alison (vol. iv. p. 239) presents a list, which shews the number to have been 1,027,106; but this enumeration does not comprehend the massacres at Versailles, the prisons of Paris, and some other places. A million and a half would probably be a safe calculation. One thing is certain, that from the 2d of September 1792, to the 25th of October 1793, a space of little more than three years, 13,613 persons perished by the guillotine. Strangely enough, the chief destruction of life was among the humbler classes of society, those who mainly promoted the revolution; and still more strange, the greater number of victims were murdered by the verdicts of juries—a striking example of that general subserviency which has since become the most significant defect in the French character.

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